MEMORANDUM

DATE: January 4, 1994

TO: Division Files

FROM: Chris Cahnovsky - Collinsville Region () C

SUBJECT: 11905000002 - Madison County

Clark Oil and Refining

ILD041889023

FOS

On January 3, 1994 I conducted a site visit at the Clark Oil and Refining facility in Hartford, Illinois. The purpose of this visit was to observed the apparent completion of F037 and F038 sludge removal from the western portion of the Guard Basin and to observe the status of sludge removal of the eastern portion of the Guard Basin. I arrived on site at 2:09 p.m. and met with Bill Irwin and Massood Modarres.

Mr. Irwin said that the sludge removal in the western portion was completed on December 10, 1993. Approximately 4.5 to 5 feet of sludge was removed from the bottom of the western portion of the basin and sent to Peoria Disposal Company as F037 and F038. I conducted a visual inspection of the Guard Basin. The sludge appears to have been adequately removed from the western portion of the Basin. The bottom of the surface impoundment appeared to be a mixture of clay and soil. Some oil stained dirt was observed. Mr. Irwin said that this stained soil was not sludge. On the southeastern end of the cleared part of the Basin standing water was observed. This water did not appear to have a petroleum sheen on top. Per Mr. Irwin, Clark has had no problem with groundwater entering the western portion of the Guard Basin.

The consulting firm of Black and Veach have conducted an assessment of this area to determine and certify that all of the sludge has been removed. According to Mr. Irwin, 35,000 cubic yards of sludge have been removed from the Guard Basin to date. There are about 10,000 cubic yards remaining in the eastern portion of the Guard Basin. Clark originally estimated that the Guard Basin contained 24,420 cubic yards of sludge. The eastern portion is expected to be completed by the end of January, 1994. At which time another inspection will be conducted.

A dam has been constructed between the eastern and western portions of the Guard Basin and Clark intends to release storm water back into the western portion of the Basin the week of January 10, 1994. I asked Mr. Irwin if releasing stormwater into this portion would compromise the results of any bottom samples the Agency may require. He did not feel that any future sampling

11905000002 - Madison County Clark Oil and Refining ILD041889023 Page 2 of 2

would be affected by the stormwater. I also inquired about oil that might be contaminating the stormwater. Mr. Irwin said that oil is skimmed off the stormwater in the "cement pond" before being discharged to the Guard Basin. If any further work needs to be done, Clark could drain the stormwater from the Basin. I concluded this site visit at 3:04 p.m.

The following is a list of attachments to this memo:

- 1) Guard Basin Clean Up Truck Loading Schedule Update;
- 2) Guard Basin Clean Up Cost Update and Projection;
- 3) TCLP Volatile Organic Analysis for Guard Basin Sludge w/ trip blank;
- 4) TCLP Metals Analysis for Guard Basin Sludge;
- 5) Site Map and
- 6) Site photographs.

CNC

cc: Collinsville Region cc: Carol Berry - DLC

cc: John Sherrill

Hartford Refinery

TO:

G. R. Watson

R. E. Schuetz

B. Irwin

FROM:

D. A. Schwartzkopf

DATE:

December 4, 1993

SUBJEÇT:

Guard Basin Clean Up Truck Loading Schedule - Update

The following data is furnished as a schedule update for truck loading on the guard basin project:

<u>Date</u>	No. Of Trucks To Load	Actual	Cumulative Scheduled	Cumulative Actual
8-30-93	0	5*	5	5
8-31-93	20	15	25	20
9-01-93	20	16	45	36
9-02-93	30	29	75	65
9-03-93	30	0	105	65
9-06-93	• 0	0	105	65
9-07-93	35	0	140	. 65
9-08-93	40	10	180	75
9-09-93	40	0	220	75
9-10-93	45	0	265	75
9-13-93	45	0	310	75
9-14-93	45	11	355	86
9-15-93	45	20	400	106
9-16-93	50	20	450	126
9-17-93	50	19	500.	145
9-20-93	50	19	550	164
9-21-93	50	25	600	189
9-22-93	50	9	650	198
9-23-93	50	0 .	700	198
9-24-93	50	0	750	198
9-27-93	50	0	800	198
9-28-93	50	13	850	211
9-29-93		15	900	226
9-30-93		17	950	243
10-01-9	3 50	19	1000	262
10-04-9		20		282

10-05-93	20	302
10-06-93	24	326
10-07-93	32	358
10-08-93	25	383
10-11-93	21	404
10-12-93	24	428
10-13-93	. 24	453
10-14-93	10	463
10-15-93	24	487
10-18-93	23	510
10-19-93	22	532
10-20-93	23	555
10-21-93	20	575
10-22-93	21	596
10-25-93	22	618
10-26-93	27	645
10-27-93	27	672
10-28-93	28	700
10-29-93	33	733
11-01-93	22	755
11-02-93	28	783
11-03-93	27	810
11-04-93	29	839
11-05-93	25	864
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12-13-93	25	1292
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TO:

Bill Irwin

FROM:

Ed Schuetz

DATE:

December 4, 1993

SUBJECT:

Guard Basin Clean-Up AFE 8927

Cost Update and Projection

REFERENCE:

Attachment 1

Attachment 2

Attachment 3

Regarding above said subject, please review referenced Attachment 1, cost summary. This summary reflects actual cost to date.

Refer to Attachment 2 for projected costs for labor, material and equipment per week. Refer to Attachment 3 for a tabulated summary of costs to date and a projected cost for completion.

Currently the total cost per cubic yard for disposal is \$140.37. If this number does not change, based on the Construction Department's estimate of 23923 cu. yds of sludge remaining in basin, estimated remaining cost to complete as of 12/03/93 would be \$3,358,071.51. This number does not include estimated expended total to date of \$3,971,344.65. The projected Grand Total for completion is \$7,329,416.16.

ES:sld

cc:

DAS

GRW

ESTIMATED COSTS T	O DATE	Page 1 of 5 12-04-93	
EQUIPMENT			
• 790 EL LONG SKK TRAC-HOE:	•		
4 Months @ \$9,000.00/month		\$36,000.00	
• CASE 1550 LP DOZER: (SWAMP CAT):			
3 Month @ \$5,595.00/month		\$ 16,785.00	
3 weeks @ \$1,398.75/week		\$ 4,196.25	
	Total Swamp Cat	\$ 20,981.25	
• JD 690 D TRAC-HOE:			1
2 Weeks @ \$2,000.0/week		\$ 4,000.00	W.
Modify Bucket		\$ 500.00	
	Total JD 690	\$ 4,500.00	
• CASE 220 TRAC-HOE:			
3 month @ \$7,500.00/month		\$ 22,500.00	
3 weeks @ \$1,875.00/week		\$ 5,625.00	
Install 3 yd. bucket		\$ 1,000.00	A.
Install Cab A/C		\$ 3,600.00	زهالانع
	Total Case 220	\$ 32,725.00	•
• LINK BELT 60' TRAC-HOE:		•	
3 month @ \$9,750.00/month		\$ 29,250.00	
1 weeks @ \$2,437.50/week		\$ 2,437.50	
Mob-Demob (Peoria)		<u>\$ 2,000.00</u>	
	Total Link Belt	\$ 33,687.50	
• CRANE MATS: TRAC-HOE BASE SUPPOR	Γ	•	
3 Mats @ 14 weeks		\$ 2,100.00	•
6 Mats @ 17 weeks		\$ 5,100.00	+
4 Mats @ 15 weeks		<u>\$ 3,000.00</u>	Lylla
* NOTE: Mat Rental 50.00/Mat/Week	•		Į.
	Total Mat Rental	\$10,200.00	
• PUMPS: DE-WATERING			
1-6" Detroit Diesel		1	1
15 weeks @ \$465.00/week		\$ 6,975.00	Sytra
1-8" Sykes Diesel		1	\sim /
11 weeks @ \$500.00/week		\$ 5,500.00	

1-6" Allied Diesel

17 weeks @ 450.00/week

COST SUMMARY

Attachment 1

\$ 7,650.00

		Page 2 of 5 12-04-93
1-3" Gasoline Trash 17 weeks @ 152.00/week 1-JD Tractor Drive Gator Pump		\$ 2,584.00
168 hrs. @ 35.00/hr.		\$ 5,880.00
* NOTE: Rates include hose	Total Pump Rental	\$28,589.00
• PICK-UP TRUCK 16 weeks @ \$ 192.00		\$ 3,072.00 au La Litur
• FUEL WAGON 1 week at \$ 70.00/week		\$ 70.00
• SCALE PAD 10'-0" x 10'-0"		\$ 3,000.00
 CODE "L" WAGON PIPE SLEEVE Trench Labor Only (G.R.P.) 		\$ 500.00
• CODE "L" HOSE Y-FITTING (B.C.I.)		\$ 1,200.00 estra
• ACCESS WALKWAY (B.C.I.)		\$ 900.00
 SURFACE DRAINAGE PLUGS 10 Locations 		\$ 1,000.00
• DIESEL PUMP PLATFORM W/STAIRS		\$ 1,500.00
• ROCK 2" clean, 3" minus & grade 8 750 ton @ \$5.50/T (Ave)		\$ 4,125.00 extra
BACKFILL 45 loads @ \$50.00/LD	·	\$ 4,125.00 estra \$ 2,250.00 estra
• MISC. SUPPLIES & EQUIPMENT		\$ 3,000.00

TOTAL EQUIPMENT \$187,299.75

Attachment 1

			Attachment 1 Page 3 of 5 12-04-93
	CONTRACT LABOR		1.6-07-73
	B.C.I. CONTRACTORS,		
·	Operator Journeyman 1037 M.H. Straight Time	@ 43.18	\$ 44,777.66
	347 M.H. Straight Time & 1/2	@ 62.17	\$ 21,572.99
	Safety Director		
· •	56 M.H. Straight Time	@ 42.64	\$ 2,387.84
	Laborer		
	213 M.H. Straight Time	@ 36.61	\$ 7,797.93
	Mechanic		
	33 M.H. Straight Time	@ 42.15	\$ 1,390.95
	Teamster		
	28.5 M.H. Straight Time	@ 36.40	\$ 1,037.40
		TOTAL CONTRACT LABOR	\$ 78,964.77
	CLARK LABOR		
	Operators		
	816 M.H. Straight Time	@ 25.00	\$20,400.00
	339 M.H. Straight Time & 1/2	@ 37.50	\$12,712.50
	Laborers	0.44.00	***
•	1441 M.H. Straight Time	@ 25.00 @ 27.50	\$36,025.00
	568 M.H. Straight Time & 1/2	@ 37.50	\$21,300.00
	N D C CITE I I DOD	TOTAL CLARK LABOR	\$90,437.50
	P.D.C. SITE LABOR		
	Project Manager		
	340 M.H. Straight Time	@ 50.00	\$17,000.00
	34 M.H. Per Diem	@ 75.00	\$ 2,550.00
	тот	AL P.D.C. SITE LABOR	\$19,550.00
	P.D.C. EQUIPMENT		
	Site Vehicle		,
	340 Hours	@ 7.50	\$ 2,550.00
	Trailer 1 Month	@500.00	\$ 500.00
	1 MOIIII		
		TOTAL P.D.C. EQUIPMENT	\$ 3,050.00

P.D.C. LIME USAGE

994.49 Tons

@ 19.00/T

\$18,895.31

TOTAL P.D.C. LIME

\$18,895.31

P.D.C. LUMP SUM

\$87,290.00

P.D.C. SITE DISPOSAL

28292 CU. YDS.

@ 123.21

TOTAL P.D.C. SITE DISPOSAL

\$3,485.857.32 2,387,40/.

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117.73

COST	SUMMARY
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	Grand Total	\$3	,971,344.65
Total P.D.C. Site Disposal		\$3	,485,857.32
Total P.D.C. Lump Sum		\$	87,290.00
Total P.D.C. Lime		\$	18,895.31
Total P.D.C. Equipment		\$	3,050.00
Total P.D.C. Labor		\$	19,550.00 ~
Total Contract Labor		\$	78,964. 77
Total Clark Labor		\$	90,437.50
Total Equipment	•	\$	187,299.75

	PROJECTED I/M WEEKLY COSTS	Attachment 2
	LABOR, MATERIAL & EQUIPMENT	Page 1 of 2
		12-04-93
8	EQUIPMENT	
	790 EL LONG STICK TRAC-HOE	\$300.00/DAY
	1550 CASE DOZER	\$186.50/DAY
	220 CASE TRAC-HOE	\$250.00/DAY
	LINK BELT 60' TRAC-HOE	\$325.00/DAY
	CRANE MATS (13 TOTAL)	\$260.00/DAY
		\$200.00/DAI
	PUMPS, DIESEL	ቁተ <i>የሚ ሳር/ሙል እን</i>
	TWO 6" & ONE 8"	\$187.29/DAY
	PUMP,GASOLINE	001.01.00.477
	ONE 3"	\$21.71/DAY
	PICK-UP TRUCK	\$27.43/DAY
	CUD TOTAL EQUIDAENT	\$1557 O2
	SUB-TOTAL EQUIPMENT	\$1337.93
	CONCERNICATION MATERIAL CURRITER	
•	CONSTRUCTION MATERIAL, SUPPLIES,	
	CONSUMABLES AND SMALL EQUIPMENT.	Ф 211 <i>E</i> O
	PLUS 20% PER DAY.	\$ 311.59
	TOTAL EQUIDATION AV	\$1960 5 0
	TOTAL EQUIPMENT/DAY	
	TOTAL EQUIPMENT/WEEK	311217.12
	I A DOD CONTON A CTOR	
•	LABOR,CONTRACTOR	
	OPER ATOR FOREMAN	
	OPERATOR FOREMAN,	00170 40
	48 M.H./WEEK STRAIGHT TIME \$45.01/HR.	\$2160.48
	18 M.H/WEEK STRAIGHT TIME AND 1/2 \$64.80/HR.	\$1166.40
	OPERATOR JOURNEYMAN,	
	96 M.H./WEEK STRAIGHT \$43.18/HR.	\$4145.28
	36 M.H./WEEK STRAIGHT TIME AND 1/2 \$62.17/HR.	\$2238.12
	SAFETY DIRECTOR,	
	4 M.H./WEEK STRAIGHT TIME \$42.64	\$ 170.56
	LABORER	
	14 M.H./WEEK STRAIGHT TIME \$36.61	\$ 515.54
	MECHANIC,	
	7 M.H./WEEK STRAIGHT TIME \$42.15	\$ 295.05

PROJECTED T/M WEEKLY COSTS

Attachment 2

TEAMSTER
2 M.H./WEEK STRAIGHT TIME \$36.40

\$ 72.80

TOTAL OUTSIDE LABOR/WEEK \$10764.23

CLARK LABOR

LABORERS	
96 M.H./WEEK STRAIGHT TIME \$25.00	\$2400.00
36 M H /WEEK STRAIGHT TIME AND 1/2 \$37.50	\$1350.00

TOTAL CLARK LABOR/WEEK \$3750.00

• P.D.C. SITE MANAGEMENT

PROJECT MANAGER	
55 M.H./WEEK STRAIGHT TIME \$50.00	\$2750.00
SITE VEHICLE	
40 HOURS/WEEK STRAIGHT TIME \$7.50	\$ 300,00
OFFICE TRAILER	
40 HOURS/WEEK STRAIGHT TIME \$2.00	\$ 80.00

TOTAL P.D.C. SITE / WEEK \$3130.00

P.D.C. DISPOSAL FEES

125 LOADS/WEEK = 2875 CU.YDS/WEEK 2875 CU.YDS. @ 123.21/CU.YD.

\$354,228.75

119.75

TOTAL P.D.C. DISPOSAL FEES/WEEK \$354,228.75

T/M COST PER WEEK SUMMARY

TOTAL EQUIPMENT	\$11,217.12
TOTAL CONTRACT LABOR	\$10,764.23
TOTAL CLARK LABOR	\$ 3,750.00
TOTAL P.D.C. SITE MANAGEMENT	\$ 3,130.00
TOTAL P.D.C. DISPOSAL FEES	\$354,228.00

PROJECTED TOTAL COST PER WEEK \$383,089.35

6.7%

PROJECT SUMMARY

LOADS OUT TO LANDFILL

MONTH	NUMBER OF LOADS	TOTAL VOLUME (C.Y.)	TOTAL WEIGHT (TONS)	TOTAL COST PER CU. YD.
AUGUST	13	293	. 287.92	950000
SEPTEMBER	223	5,105	5,204.05	\$ 166.54
OCTOBER	499	11,435	11,643.42	\$ 152.06
NOVEMBER	479	11,459	11,667.86	\$ 140.37
TOTAL	1,214	28,292	28,803.25	\$ 152.99

PROJECTED COSTS

MONTH	NUMBER OF LOADS	TOTAL VOLUME (C.Y.)	TOTAL COST/CU.YD.	TOTAL COST/MONTH
DECEMBER	300	7,177	\$140.37	\$1,007,435.49
JANUARY	450	10,765	\$140.37	\$1,511,083.05
FEBRUARY	250	5,981	\$140.37	\$ 839,552.97
TOTAL	1,000	23,923	\$140.37	\$3,358,071.51

NOTE: THE TOTAL COST PER CU. YD. INCLUDES ALL LABOR, MATERIAL, AND EQUIPMENT.

TOTAL COST PER 100 LOADS (2392.3 CU.YD.) \$335,807.16

ENVIRONMETRICS

CLARK OIL & REFINING CORPORATION P.O. BOX 7 HAWTHORNE STREET HARTFORD, IL 62048 2345 Millpark Drive Maryland Heights, MO 63043 (314) 427-0550

ATTN: MO MODARRES

INVOICE # 24255 PO # 748187

TCLP VOLATILE ORGANIC ANALYSIS METHOD SW-846 8240

SAMPLE ID: GUARD BASIN SLUDGE

LAB ID: 9312638

CAS		REGULATORY LEVEL	PRACTICAL QUANTITATION	-
			· ·	***
<u>NUMBER</u>		<u>μα/L</u>	LIMIT	<u>RESULTS</u>
75-01-4	Vinyl Chloride	200	100 μg/l	U μg/l
75-35-4	1,1-Dichloroethene	700	50	U
67-66-3	Chloroform	6,000	200	U
107-06-2	1,2-Dichloroethane	500	50	· U
78-93-3	2-Butanone	200,000	150	130BJ
56-23-5	Carbon Tetrachloride	500	50	U
79-01-6	Trichloroethene	500	50	U
71-43-2	Benzene	500	50	21 J
127-18-4	Tetrachloroethene	700	50	ប
108-90-7	Chlorobenzene	100,000	50	Ū
106-46-7	1,4-Dichlorobenzene	7,500	100	ប

TCLP SEMIVOLATILE ORGANIC COMPOUNDS METHOD SW-846 8270

SAMPLE ID: GUARD BASIN SLUDGE

LAB ID: 9312638

		REGULATORY	PRACTICAL	
CAS		LEVEL	QUANTITATION	
<u>NUMBER</u>		<u>μg/L</u>	<u>LIMIT</u>	<u>RESULTS</u>
110-86-1	Pyridine	5,000	500 μ g/l	$U \mu g/1$
95-48-7	o-Cresol	200,000	100	บ
106-44-5	m & p-Cresol	200,000	100	ប
67-72-1	Hexachloroethane	3,000	100	ט
98-95-3	Nitrobenzene	2,000	100	Ŭ
87-68-3	Hexachlorobutadiene	5 00	100	Ū
88-06-2	2,4,6-Trichlorophenol	2,000	100	U
95-95-4	2,4,5-Trichlorophenol	400,000	100	U
121-14-2	2,4-Dinitrotoluene	3,000	100	U
118-74-1	Hexachlorobenzene	130	100	U
87-86-5	Pentachlorophenol	100,000	100	U

U = UNDETECTED

B = PRESENT IN BLANK

J = DETECTED, BUT BELOW PRACTICAL

QUANTITATION LIMIT

DATE COLLECTED : 12/06/93 DATE RECEIVED : 12/13/93

DATE ANALYZED : 12/16/93

DECEMBER 22, 1993

WAYNE L. COOPER

LABORATORY DIRECTOR

ENVIRONMETRICS

DDACTICAT

CLARK OIL & REFINING CORPORATION P.O. BOX 7 HAWTHORNE STREET HARTFORD, IL 62048

2345 Millpark Drive Maryland Heights, MO 63043 (314) 427-0550

ATTN: MO MODARRES

INVOICE # 24255 PO # 748187

TCLP VOLATILE ORGANIC ANALYSIS METHOD SW-846 8240

DECITE ATTODY

SAMPLE ID: TCLP BLANK LAB ID: TBBLK2445A

	•	REGULATURI	PRACTICAL	
CAS		LEVEL	QUANTITATION	•
<u>NUMBER</u>		μ g/L	<u>LIMIT</u>	RESULTS
75-01-4	Vinyl Chloride	200	$100 \mu g/1$	$U \mu g/1$
75-35-4	1,1-Dichloroethene	700	50	Ŭ
67-66-3	Chloroform	6,000	200	Ŭ
107-06-2	1,2-Dichloroethane	500	50	Ŭ
78-93-3	2-Butanone	200,000	150	140BJ
56-23-5	Carbon Tetrachloride	500	50	Ú
79-01 - 6	Trichloroethene	500	50	Ŭ
71-43-2	Benzene	500	50	U
127-18-4	Tetrachloroethene	700	50	U
108-90-7	Chlorobenzene	100,000	50	U
106-46-7	1,4-Dichlorobenzene	7,500	100	U

TCLP SEMIVOLATILE ORGANIC COMPOUNDS METHOD SW-846 8270

SAMPLE ID: TCLP BLANK LAB ID: TASBLK4316

LEVEL	QUANTITATION	RESULTS
5,000	$500 \mu g/1$	U μg/l
200,000	100	บ
200,000	100	Ū
3,000	100	U
2,000	100	U
500	100	U
2,000	100	U
400,000	100	Ŭ
3,000	100	ប
130	100	U
100,000	100	U
	LEVEL μg/L 5,000 200,000 3,000 2,000 500 2,000 400,000 3,000	μg/L LIMIT 5,000 500 μg/l 200,000 100 200,000 100 3,000 100 2,000 100 2,000 100 2,000 100 400,000 100 3,000 100 130 100

U = UNDETECTED

B = PRESENT IN BLANK

J = DETECTED, BUT BELOW PRACTICAL

QUANTITATION LIMIT

DATE COLLECTED : ---DATE RECEIVED

DATE ANALYZED : 12/15 & 16/93 **DECEMBER 22, 1993**

COOPER

LABORATORY DIRECTOR

1377 ROAMETRIES

2345 Millpark Drive Maryland Heights, MO 63043 (314) 427-0550

TARK OIL & REFINING CORPORATION F.O. BOX 7 HAWTHORNE STREET HARTFORD, IL 62048

ATTN: MO MODARRES

INVOICE # 24255 PO # 748187

ANALYSIS RESULTS

SAMPLE ID: GUARD BASIN SLUDGE

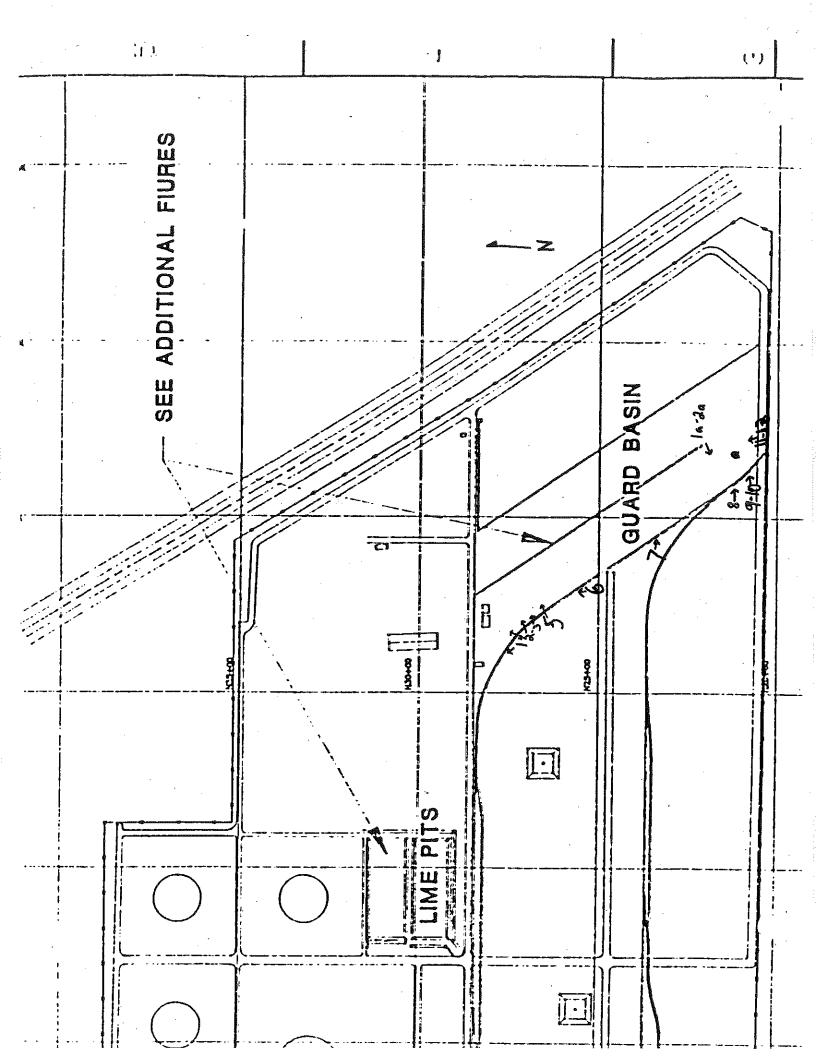
LAB ID: 9312638

DATE COLLECTED: 12/06/93

TEST PERFORMED	METHOI <u>ANALY</u> S			RESU	LTS	ANALYST	2
TCLP EXTRACTION	SW-846	1311	REGULATORY				
METALS ANALYSIS	SW-846	6010	LEVEL	EXTRACT	ION		
ARSENIC BARIUM CADMIUM CHROMIUM LEAD SELENIUM SILVER MERCURY	SW-846	7470	5.0 100.0 1.0 5.0 5.0 1.0 5.0	<0.200 0.964 <0.005 0.574 <0.100 <0.200 <0.040 <0.0002		12/20/93	B.C.
IGNITABILITY (SETAFLASH)	SW-846	1020	>:	200	(°F)	12/21/93	C.F.
CORROSIVITY (pH)	SW-846	9045		6.98		12/20/93	C.F.
REACTIVE CYANIDE	SW-846	9010		<0.2	mg/kg	12/21/93	C.F.
REACTIVE SULFIDE	SW-846	9030		2.27	mg/kg	12/20/93	S.H.
PHENOLS	SW-846	9065		20.31	mg/kg	12/22/93	R.D.
PAINT FILTER	SW-846	9095		EE LIQUI SSED)	D	12/21/93	S.H.

DECEMBER 22, 1993

WAYNE L. COOPER LABORATORY DIRECTOR



8/14/87

Site Inspection, Clark Oil/Wood River Lily Herskovits

J.N. Mayka

On july 22, 1987 completed a site inspection at Clark Oil/Wood River facility. It was a joint inspection with IEPA and USEPA. Mike Grant from the Collinsville office came out with me to the site. John Bernbom, Director of Environmental Control, Joe F. Bean and Charles E. Knipping represented Clark Oil. I presented them my reasons for the inspection and asked to tell me about their waste streams, how these streams generated, handled. As a general information I asked Clark about their product slate, feedstock types and what process units they have at the Wood Riversite. The basis for my inquiry was the 3007 questionaire that HO's sent out in 1985. The company processes sour crude, which is recieved through pipeline. Following process units are at Clark Oil: Desalter, Atm. Distillation, Vacuum Distillation, Hydrotreaters, Platformers, Merox, FCC, Coker, Gas Separation. According to Mr. Bernbom all the waste goes into Wastewater treatment plant. The only waste stream generated is API separator bottoms and Leaded tank bottoms. Both waste streams are removed by vacuum suction into a tank car, which is the property of a waste hauler, and the waste shipped out immediately after the removal. Clark has a temporary drum storage area.

Regarding the wastewater treatment system there are two systems: sauer and storm water. The slop oil solids content .2 wt%. It is sorted depending on oil properties. The clean slop oil goes back to the destillation the solid containing goes for coking. According to Clark there is almost no sludge formation in the leaded tanks. After the meeting, question and answers we inspected the WWTP. There is a question in my mind regarding the recycling of the overflow from the sludge separator. A detailed drawings show the actual listed waste handling - this I filed with all the facility informations. Recommendations: it is suggested that a thorough testing to be completed around the API separator and the Waste Manifests to be reviewed for verification of the type and quantity of waste together with the frequency of their waste disposal.

CLARK OIL & REFINING CORPORATION

March 5, 1986

RCRA Activities Region V P.O. Box A3587 Chicago, Illinois 60690

Attn: ATKJG

Re: U.S. EPA ID#: ILDO41889023

Clark Oil & Refining Corporation

P.O. Box 7

Hartford, IL 62048

Dear Sir:

Please receive the "Certification Regarding Potential Releases From Solid Waste Management Units." This cover letter of explanation is submitted in lieu of signing the certification. Our hazardous waste units are as shown in our Part A application. Our Federal Interim Status was terminated September 20, 1983.

Sincerely,

Director of Environmental Control

dlg

Enclosure

CERTIFICATION REGARDING POTENTIAL RELEASES FROM SOLID WASTE MANAGEMENT UNITS

Clark Oil & Refini	ng Corporatio	On .
ILDO 41889023		
Hartford		
Illinois		
facility? NOTE - DO	NOT INCLUDE	Jement units (existing or HAZARDOUS WASTE UNITS
(Above Ground) (Underground) orage Area lls reatment Units tions ing Operations	YES	NO
ription of the wastes In particular, placed as hazardous was lude any available of the dates of disposed include capacity,	that were s lease focus o sstes or haza data on quant sal. Please	tored, treated or disposed in whether or not the wastes indous constituents under ities or volume of wastes also provide a description
	Hartford Illinois f the following soling facility? NOTE - DO IN YOUR PART A APPL undment (Above Ground) (Underground) orage Area lls reatment Units tions ing Operations ing Operation	Hartford Illinois f the following solid waste manage facility? NOTE - DO NOT INCLUDE IN YOUR PART A APPLICATION YES Underground) (Underground) orage Area lls reatment Units tions ing Operations ing Operations ing Operations ing the wastes that were services and the wastes or haza clude any available data on quant if the dates of disposal. Please and include capacity, dimensions a

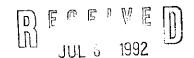
NOTE: Hazardous wastes are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.

in abl	r the units noted in Number 1 above and your Part A application, please describle on any prior or current releases of hother environment that may have occurred curring.	e for each unit any data avail- azardous wastes or constituents
Ple	ease provide the following information	
a. b. c. d.	Type of waste released Quantity or volume of waste released	l, overflow, ruptured pipe
ple whi tha	regard to the prior or continuing release provide (for each unit) any analytich would describe the nature and extendat exists as a result of such releases. Exardous wastes or constituents present	ical data that may be available tof environmental contamination. Please focus on concentrations
•		*
I (certify under penalty of law that this	document and all attachments were
de: the who the tri	repared under my direction or supervision esigned to assure that qualified personner in a supervision of the information submitted. Based on my into manage the system, or those persons dine information, the submittal is, to the rue, accurate, and complete. I am aware ies for submitting false information, in and imprisonment for knowing violations.	el properly gather and evaluate nquiry of the person or persons irectly responsible for gathering best of my knowledge and belief that there are significant pendicluding the possibility of fine
40	CFR 270.11(d))	
4.	Typed Name and Title	
	Signature	Date

From superfund

EPA Region 5 Records Ctr.

Clark Oil & Refining Corp. ILD041889023 Superfund HRS



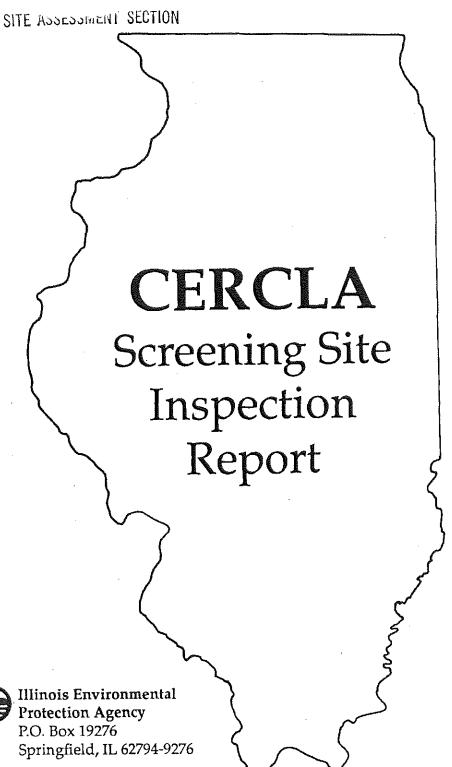


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Appendix

I. INTRODUCTION

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On December 11, 1990, the Illinois Environmental Protection Agency's Pre-Remedial Unit was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a CERCLA Screening Site Inspection (SSI) of the Clark Oil and Refining Corporation/Wood River Refinery, Hartford, Illinois.

The site was initially placed on the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) by the U.S. EPA in August of 1980. This action was taken as a result of the concern over possible groundwater and surface water contamination due to operations at the facility.

An initial CERCLA evaluation, in the form of a Preliminary Assessment, was completed by Kenneth L. Page of the IEPA in January of 1986. IEPA's Pre-Remedial Unit prepared an SSI workplan for Clark Oil and Refining that was approved by the U.S. EPA's Region V office in December of 1990. The sampling portion of the Screening Site Inspection was conducted on December 11 and 12, 1990 when the sampling team collected a total of six groundwater and twelve soil samples.

The purpose of a Screening Site Inspection have been stated by the U.S. EPA in a directive that states:

All sites will receive a screening SI to 1) collect

additional data beyond the PA to enable a more refined preliminary HRS (Hazard Ranking System) score, 2) establish priorities among sites most likely to qualify for the NPL (National Priorities List), and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQO's). Based on the Preliminary refined HRS score and other technical judgement factors, the site will either be designated as NFRAP (No Further Remedial Action Planned), or carried forward as an NPL listing candidate. A Listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority, such as RCRA [Resource Conservation and Recovery Act]... Sites that designated NFRAP or deferred to other statutes are not candidates for a listing SI.

The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQO's. It may also provide needed data in a format to support remedial investigation workplan development. Only sites that appear to score high enough for listing and have not been deferred by another authority will receive a listing SI (U.S. EPA 1988).

U.S.EPA Region V has also instructed IEPA to identify sites during the SSI that may require removal action to remediate an immediate human health and/or environmental threat.

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2. SITE BACKGROUND

2.1 Introduction

This section contains a summary of information gathered from the Preliminary Assessment, Illinois Environmental Protection Agency (IEPA) files, and discussions with site representatives.

2.2 Site Description

The p

The Clark Oil and Refining Corporation, Wood River Refinery is located in the Village of Hartford, Madison County, Illinois (Figures 2-1, 2-2 and 2-3). The refinery operations occupy approximately 253 acres located in the following sections: Sections 34 and 35, Township 5 North, Range 9 West; and Section 3, Township 4 North, Range 9 West. Clark Oil property also includes approximately 142 acres located in Section 33, Township 5 North, Range 9 West; and Section 4, Township 4 North, Range 9 West (See map located in Appendix C for features and property boundaries). A 4-mile radius map of the area surrounding the Clark Oil facility and a 15-mile surface water map can be found in Appendices A and B respectively.

Clark Oil and Refining/Wood River Refinery is an operating petroleum refinery with an approximate plant capacity of 60,000 barrels a day. Process operations include crude desalting, atmospheric crude distillation, fluid catalytic